

GENERATOR

MODEL NO: FG3000

PART NO: 8857700

OPERATION & MAINTENANCE INSTRUCTIONS

LS0609

INTRODUCTION

Thank you for purchasing this CLARKE Generator.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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GENERAL SAFETY RULES

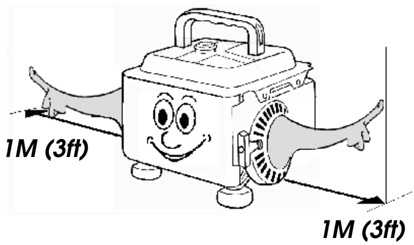
WARNING: EXHAUST FUMES CAN BE EXTREMELY DANGEROUS IF INHALED

WORK AREA

- ***Always use in a well ventilated area.***
- ***Always position the exhaust outlet away from people.***
- ***Never use indoors or in a confined space.***
- **Read these safety instructions before using the equipment.**
- **Keep children away from the generator**

POSITIONING THE GENERATOR

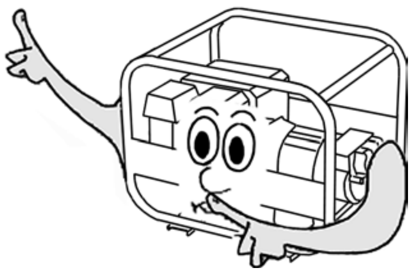
1. ***Always*** leave a least a 1M gap between the generator and any surrounding building or structures.
2. ***Always*** ensure the generator is on a solid, flat surface.
3. ***Always*** ensure the surrounding area is free from any material that could burn or be damaged by heat.



4. ***Never*** move or tilt the generator whilst it is switched on.

FIRE PREVENTION

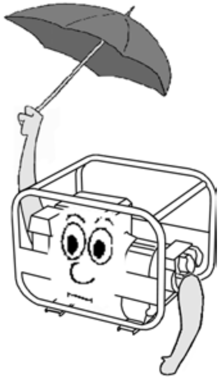
1. ***Always*** switch the engine OFF when refuelling.
2. ***Always*** refuel away from any source of heat.
3. ***Always*** refuel in a well ventilated area.
4. ***Never*** overfill the tank, fill to the level specified (See "Checking the fuel level" on page 10.).



5. ***Never*** smoke whilst refuelling and avoid smoking or using a naked flame near the generator.

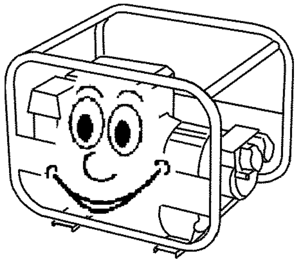
6. ***Never*** start the engine if there is spilled fuel. Any spillage must be wiped clean and the generator allowed to dry before attempting to start the engine.

PREVENTION OF ELECTRIC SHOCK

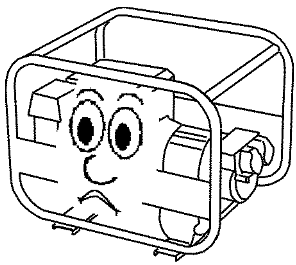


1. **NEVER** use the generator in wet conditions unless it is well protected/ covered. Under these conditions, adequate ventilation MUST be provided.
2. **NEVER** operate the generator with wet hands.
3. **NEVER** use water or any other liquids to clean the generator.
4. **NEVER** allow the generator air vents to become blocked.

ADDITIONAL SAFETY RULES FOR GENERATORS



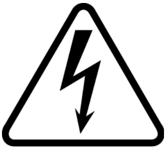
1. ***Always*** ensure the applied load does not exceed the generator rating. Overloading the generator is dangerous and could cause serious damage.
2. ***Always*** disconnect the generator when carrying out any maintenance.
3. ***Always*** ensure the generator reaches operating speed before connecting a load.
4. ***Never*** allow the generator to run out of fuel when a load is connected.
5. ***Never*** transport the generator with fuel in the tank.
6. ***Do Not*** connect to a commercial or residential power supply; e.g. ring main.



SAFETY SYMBOLS



Caution - The user should be aware of a general hazard



Dangerous Voltage



Flammable



Hot Surface - Do not touch

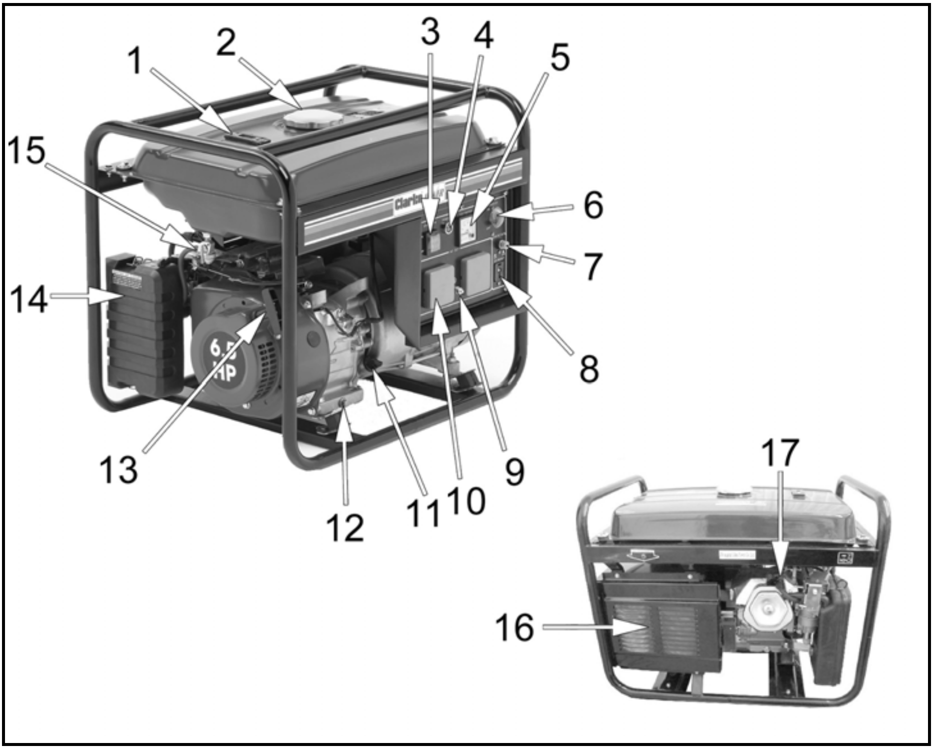


Poisonous fumes - Do not use the generator in an enclosed space.



Read Instruction manual before use.

GENERATOR OVERVIEW



NO	DESCRIPTION	NO	DESCRIPTION
1	Fuel level gauge	10	AC plug sockets (2 x 230V)
2	Fuel tank cap	11	Dipstick
3	Engine switch	12	Drain plug
4	Power Indicator	13	Starting handle
5	Voltmeter	14	Air filter
6	AC breaker	15	Fuel supply valve
7	DC reset Button	16	Muffler
8	DC 12V outlet	17	Spark plug
9	Earth Terminal		

UNPACKING AND ASSEMBLY

Unpack your generator and check to ensure the following items are present. Should there be any deficiency or damage caused during transit contact your Clarke dealer immediately.

- The Generator
- Spark Plug Box Spanner
- Tommy Bar
- 12 Volt DC Battery Charging Lead

BEFORE USING THE GENERATOR

IMPORTANT: Generators should ALWAYS be earthed.

Attach a suitable earth lead to a good earth - water pipe, ground spike etc., whenever you use this generator.

Before using your generator check that:

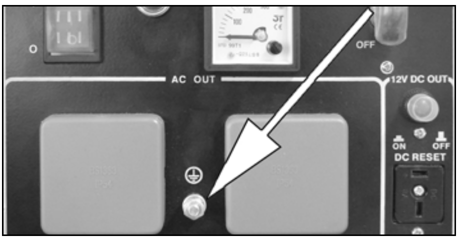
- The generator is in good condition and free from any damage.
- The generator is clean and free from fuel or oil spillage.
- The generator is correctly located for use (See page 4).
- The fuel system and connectors are intact and there is no leakage.

NOTE: Always use a funnel to fill the fuel tank so as to avoid accidental spillage of fuel. If fuel is spilled it must be removed from the unit before attempting to start the engine.

WARNING: ENSURE THERE IS ADEQUATE FUEL IN THE TANK WHEN USING THE GENERATOR. RUNNING OUT OF FUEL OR STOPPING THE ENGINE SUDDENLY WITH A LOAD CONNECTED COULD CAUSE SERIOUS DAMAGE.

EARTH POINT

Always connect the generator to an earth point. The earth terminal is shown on the right.

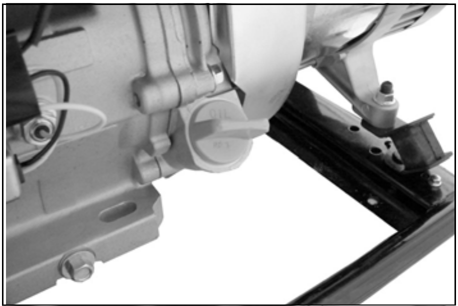


CHECKING THE ENGINE OIL LEVEL

WARNING: TO CARRY OUT THIS CHECK, PLACE THE GENERATOR ON LEVEL GROUND WITH THE ENGINE SWITCHED OFF (O).

WARNING: TAKE CARE NOT TO TOUCH ANY HOT PARTS OF THE GENERATOR WHEN CHECKING THE OIL LEVEL.

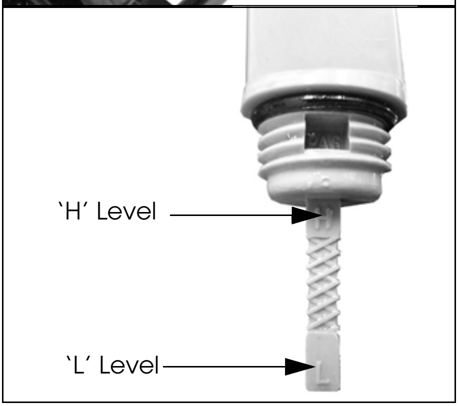
1. Turn the oil filler cap anti-clockwise and remove from the oil tank, wipe the dipstick with a clean cloth.



2. Insert the dipstick back into the oil filler tube and then remove it again. Do not screw in the oil filler cap/dipstick when doing this.



3. If the oil is below the `L' level on the dipstick, fill the oil reservoir to the `H' level on the dipstick.
   - Oil Capacity (See "Specifications" on page 21.)
   - We recommend the use of SAE30 oil in this generator.
4. Replace the oil filler cap.



CHECKING THE FUEL LEVEL

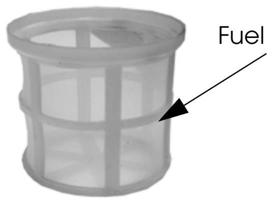
1. Check the fuel level on the fuel gauge.
   The fuel gauge will show as red when you have fuel in the tank turning white as the fuel level decreases.



2. To add fuel, open the fuel filler cap.



3. Just inside the fuel tank is a fuel tank filter, check this filter periodically and remove any contaminants which may have accumulated.



4. Slowly add fuel to the fuel tank (maximum 15L) watching the fuel level gauge as you do so.

RECOMMENDED FUEL

We recommend the use of standard unleaded petrol.

WARNING: ALWAYS REFUEL IN A WELL VENTILATED AREA AWAY FROM ANY HEAT SOURCES.

WARNING: ALLOW THE UNIT TO COOL DOWN BEFORE REFUELLING.

WARNING: DO NOT LEAVE FUEL WITHIN THE REACH OF CHILDREN.

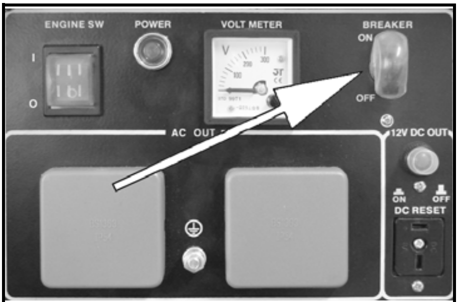
NOTE: Do not overfill the fuel tank.

5. Replace the fuel filler cap securely.

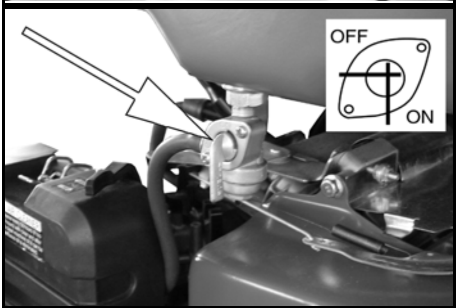
USING YOUR GENERATOR

STARTING THE ENGINE

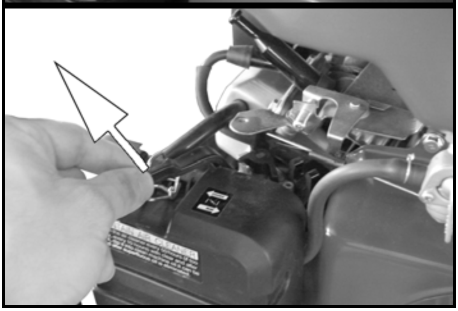
1. Remove all connections from the AC sockets.
2. Set the breaker to the off position.



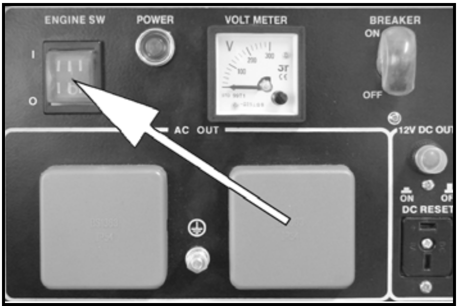
3. Turn the fuel supply valve to the 'on' position.



4. If you are starting the generator 'cold' set the choke lever to the ON position. If the generator is warm skip this step.

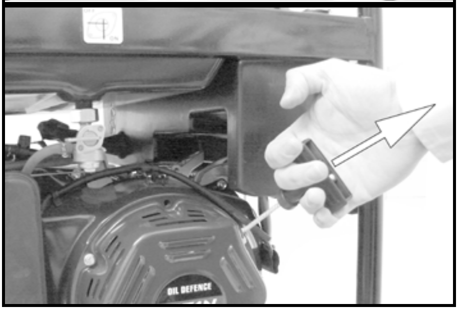


5. Set the engine switch to 'I'



6. Pull the starting handle lightly until you start to feel resistance and then pull up sharply to start the generator.

   NOTE: You may have to do this more than once.



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WARNING: ONCE THE GENERATOR HAS STARTED, RELEASE THE STARTING HANDLE SLOWLY TO AVOID INJURY/DAMAGE AS IT WHIPS BACK.

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7. Once the engine has warmed up, set the choke lever to the 'RUN' position.



CONNECTING ELECTRICAL DEVICES

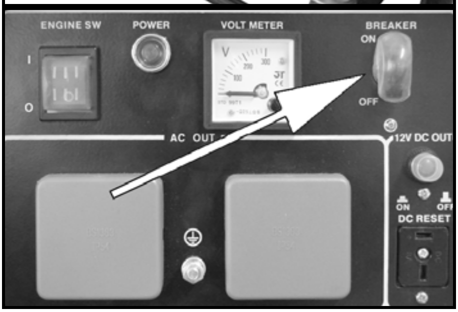
The generator can supply both 230V AC and 12V DC.

AC POWER

1. Start the engine. See page 11.
2. Make sure the appliance is turned off before connecting it to the generator.



3. Set the breaker to 'ON'
4. Connect the appliance to the generator starting with the device that draws the most current.



CAUTION: MAKE SURE THAT THE APPLIANCE BEING CONNECTED IS IN GOOD WORKING ORDER, IF IT BEGINS TO ACT ABNORMALLY OR STOPS SUDDENLY, DISCONNECT IT FROM THE GENERATOR

CAUTION: MAKE SURE THE APPLIANCE DOES NOT EXCEED THE MAXIMUM RATED LOAD FOR THE GENERATOR.

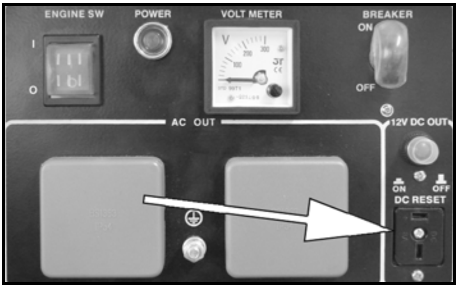
CAUTION: ANY DEVICE WITH CONTAINS AN INDUCTIVE LOAD E.G. DEVICES THAT CONTAIN A MOTOR MAY REQUIRED MORE CURRENT ON STARTUP.

DC POWER

For charging car batteries only.

CAUTION: MAKE CONNECTIONS TO THE BATTERY AFTER STARTING THE ENGINE.

1. Start the engine. See page 11.
2. Connect the battery charging leads to the battery.
   - Clamp the red wire to the positive (+) terminal and the black wire to the negative (-) terminal of the battery. Do not reverse these positions.
3. Connect the battery charging leads to the generator.

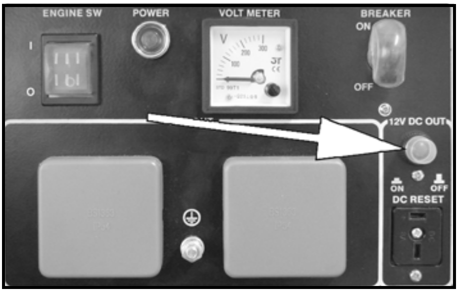


WARNING: TO PREVENT THE POSSIBILITY OF CREATING A SPARK NEAR THE BATTERY, DISCONNECT THE CABLE TO THE GENERATOR FIRST AND THEN DISCONNECT THE BATTERY

WARNING: AFTER YOU HAVE CHARGED THE BATTERY, ALWAYS DISCONNECT THE NEGATIVE LEAD FIRST.

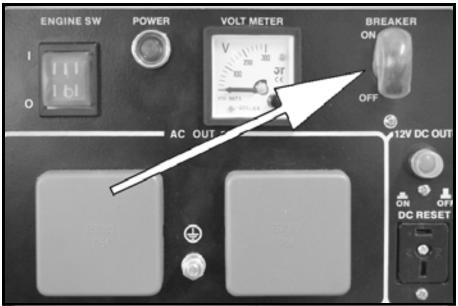
DC OVER LOAD PROTECTOR

If the DC overload protector activates, wait for a few minutes and then press the reset button shown on the right.

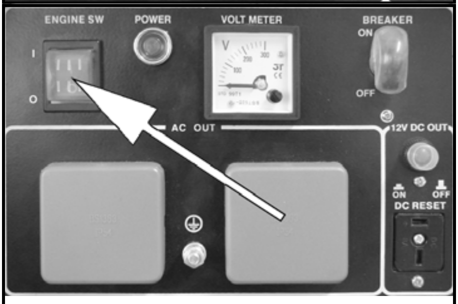


SHUTTING DOWN THE GENERATOR

1. Disconnect all appliances connected to the generator.
2. Set the breaker to 'OFF'.

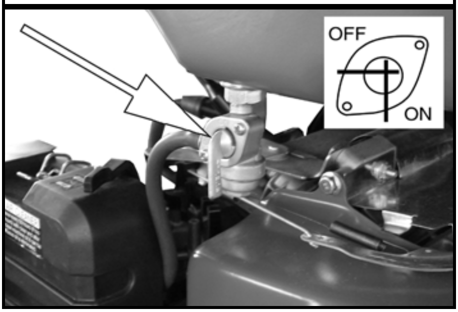


3. Set the engine switch to 'O'.



4. Set the fuel supply valve to 'OFF'.

NOTE: To stop the generator in an emergency simply Set the engine switch to 'O'



MAINTENANCE

CHANGING THE ENGINE OIL

CAUTION: PROLONGED EXPOSURE TO USED ENGINE OIL IS DANGEROUS, ALWAYS WASH YOUR HANDS THOROUGHLY AFTER HANDLING USED ENGINE OIL.

1. Unscrew and remove the oil filler cap/dipstick.
2. Place a oil collection tray under the drain plug.
3. Unscrew the drain plug, and allow the used engine oil to drain from the crankcase into the oil collection tray.

NOTE: Drain the engine oil when the engine is warm, this will ensure the oil flows out quicker.

4. Replace the drain plug and its seal ring.
5. Fill the crankcase with engine oil to the `H' mark on the dipstick. See page 9.
6. Replace the oil filler cap/dipstick.

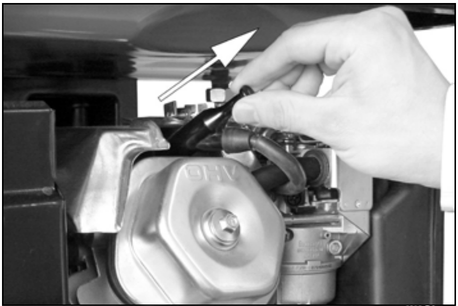
ENVIRONMENTAL PROTECTION

One of the most damaging sources of pollution is oil, Do not throw away used engine oil in with your domestic trash or down drains and sinks. Place it in a leak proof container and take it to your local waste disposal site.

CHANGING THE SPARK PLUGS

CAUTION: ALLOW THE ENGINE TO COOL BEFORE REMOVING THE SPARK PLUG.

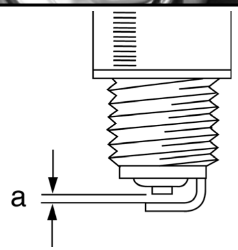
1. Remove the spark plug cap from the spark plug.



2. Use the supplied spark plug spanner to remove the spark plug.
3. Remove any carbon that has accumulated around the sparkplug.



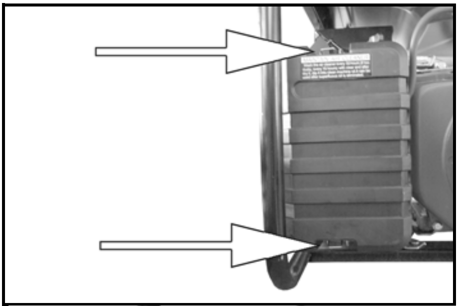
4. Check the spark plug gap (a), it should be between 0.7 and 0.8 mm, adjust if necessary.
5. Check the overall condition of the spark plug and replace if necessary.
6. Reinstall the spark plug and replace the spark plug cap.



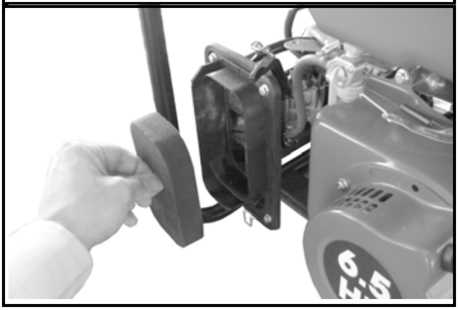
CHECKING THE AIR FILTER

CAUTION: DO NOT USE THE GENERATOR WITHOUT THE AIR FILTER FITTED, THIS CAN DAMAGE THE GENERATOR.

1. Unlock and remove the air filter cover.



2. Remove the air filter element.



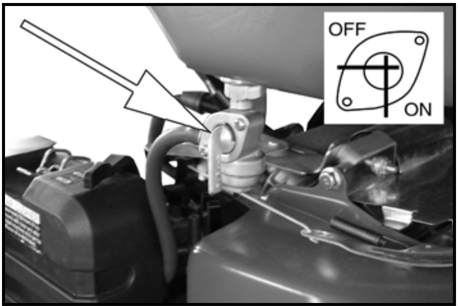
3. Make sure that the air filter is clean and not damaged.
   - If the air filter is damaged contact Clarke spare parts department for a replacement See page 24.
   - If the filter is dirty, wash the filter in a solution of warm water and mild detergent and rinse thoroughly. Leave the filter to dry completely, once it is dry immerse the filter in clean engine oil and sqeeze the filter to remove excess oil.

WARNING: DO NOT USE INFLAMMABLE SOLVENTS OR PETROL TO CLEAN THE AIR FILTER.

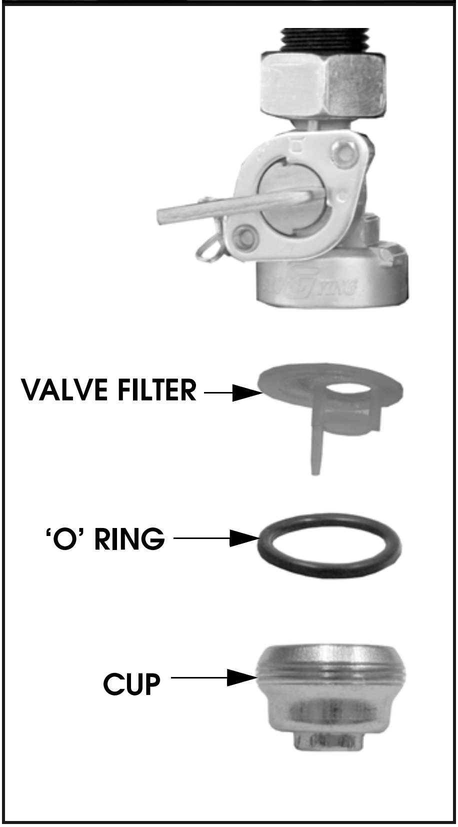
4. Replace the filter back into its original position and replace the air filter cover.

CLEANING THE FUEL VALVE FILTER / DRAINING THE FUEL TANK

1. Set the fuel supply valve to OFF.



2. Unscrew and remove the cup, then remove the valve filter and `O´ ring.
3. Wash these parts in a non-inflammable solvent. Make sure that the valve filter is not damaged.
4. Place an approved petrol storage container under the fuel valve and set the fuel supply valve to `ON´.
   - The fuel in the tank will drain into the container.
5. Replace the `O´ ring and valve filter and tighten the cup as far as possible.



TROUBLESHOOTING

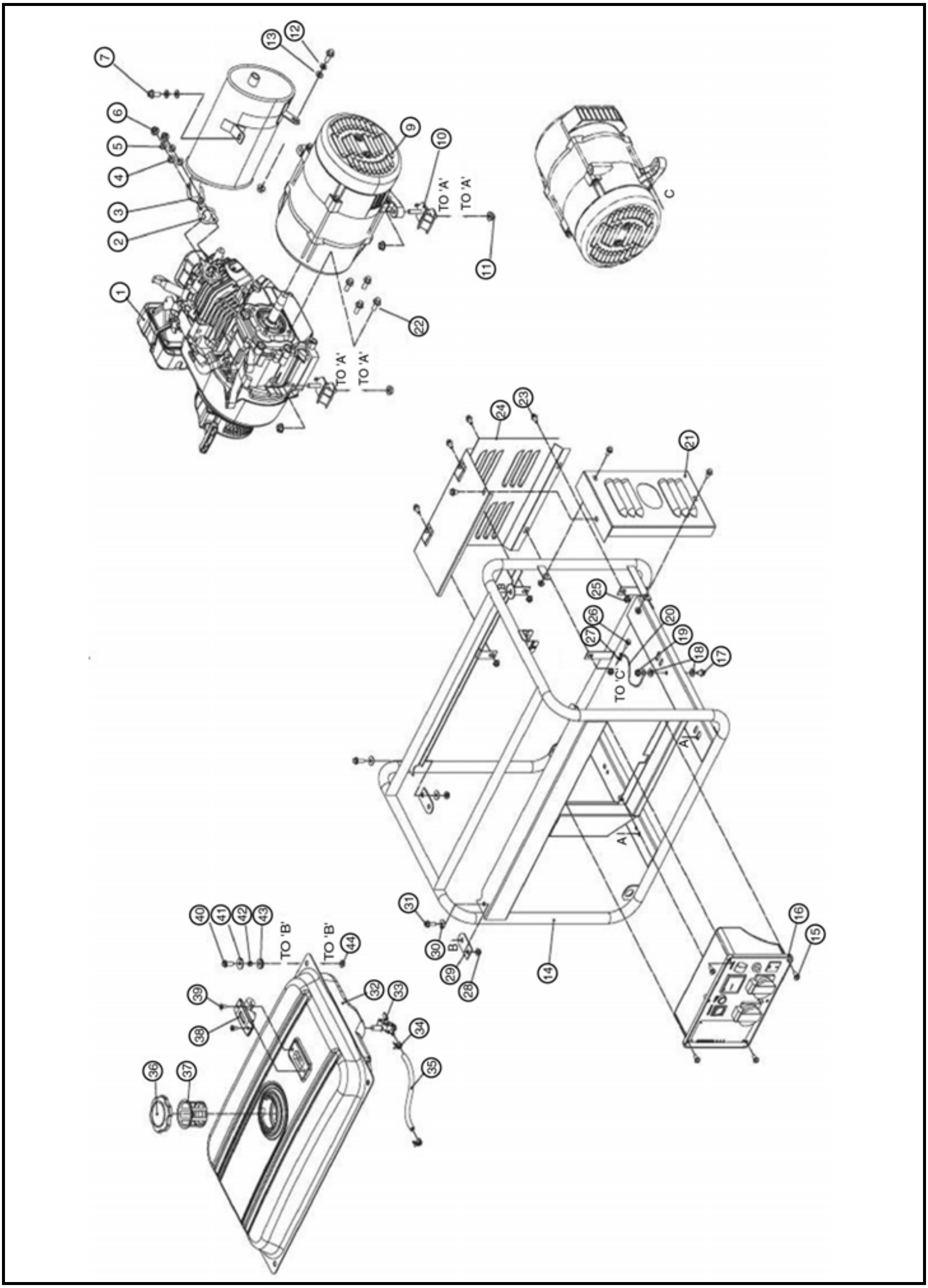
	CAUSE	SOLUTION
The generator fails to start	Engine switch is off	Set the engine switch to 'I'
	Not enough oil in the generator	Add more oil, See page 9
	No fuel	Add more fuel, See page 10
	Spark plugs not working correctly	Change the spark plugs, See page 17
The generator fails to generate electricity	The device you are trying to power is faulty	Make sure the device you want to power is working properly
	The AC breaker is switched off	Switch the AC breaker on
The generator is difficult to start	The air filter is dirty	Clean the air filter, See page 18
	The fuel filter is dirty	Clean the fuel filter, See page 19

If this does not solve your problem, please contact the Clarke service department. See page 24

SPECIFICATIONS

Engine	Engine Model	UP168
	Type	Petrol air cooled 4-Stroke OHV single cylinder
	Displacement (cm^3)	196
	Max. power output (hp/rpm)	6.5 / 3000
	Ignition type	Mag
	Start system	Recoil
	Fuel tank capacity (L)	15
	Fuel consumption (L/hr.)	1.4
	Duration of run (h)	11
	Engine oil capacity (L)	0.6
	Guaranteed sound power (L_{WA} dB)	96
Generator	Rated Frequency (Hz)	50
	Rated Voltage (V)	230
	Rated Power (kVA)	2.6
	Max. Power (kVA)	2.8
Dimensions	Length (mm)	592
	Width (mm)	498
	Height (mm)	432
	Unpacked Weight (kg)	45

EXPLODED PARTS DIAGRAM



PARTS LIST

NO	DESCRIPTION	QTY	PART NO	NO	DESCRIPTION	QTY	PART NO
1	Petrol Engine	1	RKFG300001	24	Muffler hood	1	RKFG300024
2	Muffler washer	1	RKFG300002	25	Nut M6	7	RKFG300025
3	Muffler	1	RKFG300003	26	Flange bolt M8*12	2	RKFG300026
4	Washer Ø8	2	RKFG300004	27	Gasket M8	2	RKFG300027
5	Spring washer Ø8	2	RKFG300005	28	Nut M8	2	RKFG300028
6	Nut M8	2	RKFG300006	29	Fuel stator	2	RKFG300029
7	Flange bolt M8*20	2	RKFG300007	30	Plain washer M6*8	4	RKFG300030
9	Alternator assembly	1	RKFG300009	31	Flange bolt M6*12	2	RKFG300031
10	Shock Absorber	4	RKFG300010	32	Fuel tank 15L	1	RKFG300032
11	Nut M8	8	RKFG300011	33	Fuel tank cock assem	1	RKFG300033
12	Spring washer Ø8	2	RKFG300012	34	Clamp	2	RKFG300034
13	Washer Ø8	2	RKFG300013	35	Fuel pipe	1	RKFG300035
15	Screw M6*12	4	RKFG300015	36	Fuel tank assembly	1	RKFG300036
17	Flange bolt M6*12	1	RKFG300017	37	Strainer	1	RKFG300037
18	Gasket	2	RKFG300018	38	Fuel marker	1	RKFG300038
19	Nut M6	1	RKFG300019	39	Screw M5*12	2	RKFG300039
20	Grounding wire	1	RKFG300020	40	Flange bolt M6*25	4	RKFG300040
21	Muffler hood	1	RKFG300021	42	Bush Ø6	4	RKFG300042
22	Flange bolt M8*25	4	RKFG300022	43	Shock absorber Ø8	4	RKFG300043
23	Flange bolt M6 Ø8	7	RKFG300023	44	Nut M6	4	RKFG300044

PARTS AND SERVICING

For Parts & Servicing, please contact your nearest dealer, or CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400
PARTS & SERVICE FAX: 020 8558 3622
or e-mail as follows:
PARTS: Parts@clarkeinternational.com
SERVICE: Service@clarkeinternational.com

DECLARATION OF CONFORMITY

CE

Clarke
INTERNATIONAL
Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

Product Description:	Petrol Powered Generator
Model number(s):	FG3000
Serial / batch Number:	N/A
Date of Issue:	01/06/2009
(Noise Conformity)	
Notified Body:	Societe Nationale De Certification ETD' Homologation S.A.R.L (SNCH) 11 Rout De Sandweiler 5230 Sandweiler Luxembourg
Technical Documentation Holder:	Alan Pond Clarke International 2a Shrubland Road London E10,7RB UK
Conformity Assessment Procedure:	to 2000/14/EC Annex VI
Manufacturer:	Clarke International
Noise Related Value:	1.8 kW
Measured Sound Power Level:	89 dB
Guaranteed Sound Power Level:	96 dB

FG3000-RV2 Page 1 of 2

DECLARATION OF CONFORMITY

CE

Clarke®
INTERNATIONAL
Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

89/336/EC	*Electromagnetic Compatibility Directive, (amended by 93/68/EEC).*
98/37/EC	*Machinery Directive.*
73/23/EC	*Low Voltage Equipment Directive, (amended by 93/68/EEC).*
2000/14/EC	*Noise Emissions Directive (amended by 2005/88/EC).*
97/68/EC	*Emission of Gaseous Particulates (amended by 2004/26/EC)*

The following standards have been applied to the product(s):

EN 12601:2001, EN 60034-22:1997, EN 55012:2002+A1, EN 61000-6-1:2007, EN 61000-6-3:2007

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2006

Signed:

J.A. Clarke
Managing Director

FG3000-RV2

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NOTES